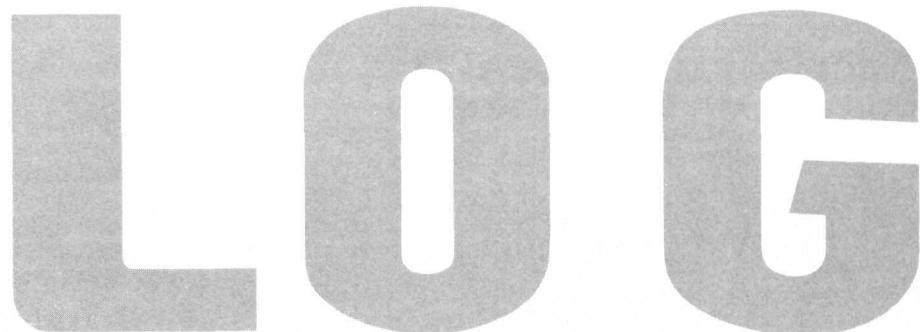


JULY 1979



ENERGY CONSERVATION

Edward A. Stone

All Sprague units have an organized energy conservation program, coordinated by local task forces. Reports from these task forces indicate concerted efforts to ensure minimum consumption in some cases and occasional innovative ideas in others. Unfortunately fully 50% of the population believes there is no energy availability problem, or if there is one, they believe it is contrived by the government or the oil companies. If half the population believes there is no energy availability problem, then achieving a fully effective energy conservation program is difficult at best. A fully effective energy conservation program requires at least 100% cooperation but ideally 100% participation.

However, on one thing we can all agree — energy is becoming increasingly expensive. The increases experienced for home fuel, electricity and gasoline are the same proportionate increases the company has experienced for its energy sources. Consequently, even with a reduction in consumption, total energy costs increase.

The only meaningful strategy to reduce the impact of these increasing costs is to reduce consumption while maintaining production. The common phrase used for that effort is energy conservation. It may be an overworked term and many are tired of hearing it, but the benefits accrue to us all.

Are there areas overlighted, are lights left on when not needed, do room temperatures exceed 68°F in the heating season or are they below 78°F in the cooling season, is other unnecessary equipment left on at night or weekends? If the answer to these questions is "yes" in any case, then we have an opportunity for improvement.

There are other not so obvious cases where energy consumption could be reduced. Are maintenance schedules prepared to keep equipment operating properly, are production schedules prepared with even an estimate made to determine its impact on energy costs, is the effect of waste on increased energy consumption included in product or quality control costs? If the answer to these questions in any case is "no," we have additional opportunities for improvement.

Get to know your local task force members, offer them any suggestions you may have. They are always looking for and are receptive to new ideas.

The fact is that our day-to-day work habits and the decisions we make to complete our assigned tasks have an impact on our energy consumption positively or negatively. Simple awareness and accounting for it can markedly improve our statistics.



WE DID IT AGAIN!

Sprague Products, for the second year in a row, took top honors for its display at the 1979 Electronic Distribution Show held at the Las Vegas Convention Center, May 1 through 4.

The unique design was the combining of ancient Greek architecture and the modern olympic games to depict the "Olympics of Distribution" theme of the show. The highlight of the display was a 25-foot high gold torch-and-header resulting in "SPRAGUE" being visible from any location in the exhibit hall. Featured products were displayed on a three-level stage simulating the "gold," "silver," and "bronze" winners.

The Sprague Advertising and Maintenance Departments once again proved to be a winning combination. Our carpenters, painters and electricians transformed design concepts of the Advertising Department into a winning reality.



APPOINTMENT ANNOUNCED

Robert C. Sprague, Jr. was appointed to membership on the Advisory Council of the Governor's Commission on Employment of the Handicapped.

Mr. Sprague is chairman for Massachusetts of the Project With Industry Outreach Program dealing with the employment of the handicapped in private industry and has been working with the industries of Massachusetts in this important program for hiring the handicapped.

The appointment to the Advisory Council was announced by Leonard Einstein, chairman of the Commission on Employment of the Handicapped effective 23 January 1979.

SPRAGUE PRODUCTS DIVISION WINS GOLD MEDAL FOR DISPLAY. Stanley D. Pitkin, Exhibits Manager of the Sprague Electric Co., center, receives plaque which accompanied the gold medal award for the best display at the annual Electronic Distribution Show from Ed Crockett of GC Electronics, Exhibits Committee Chairman, while Sidney L. Chertok, left, Corporate Director of Advertising & Sales Promotion, looks on.

The Sprague Products Company Division display was cited as being best in keeping with the theme of this year's conference, "The Olympics of Electronic Distribution." The miniature Greek temple, designed by Mr. Pitkin, received the nod as "Best in Show" from, we understand, 23 of the 25 electronic parts distributors on the Exhibits Committee.

WICHITA FALLS EMPLOYEES SURVIVE MASSIVE TORNADO

On April 10, 1979, a giant, lethal tornado swept through Wichita Falls, Texas, killing 44 people, injuring 1,000 and causing \$300 million dollars in damage. 20,000 people were left homeless, 5,000 residences and 80 businesses were destroyed or heavily damaged, with minor damage to another 2,000 residences, leaving eight miles of total devastation.

When the storm made its first contact at 6:12 p.m., 105 Sprague Electric employees were working on the second shift at the Wichita Falls plant. Power to the city was already out at this point but with emergency lighting, two production foremen, Frank Cavender and Mike Ashley, moved the people to areas of safety within the plant and kept the employees informed and calm throughout the storm.

Within minutes after the tornado, the plant maintenance people got to the plant and worked to restore power and assess the damage. Corporate managers flew to the plant within hours and brought grant money to offer financial aid to those who suffered loss and also gave money to the local assisting agencies in the community.

As soon as people could report to work, a Sprague Relief Committee interviewed each of the employees and offered financial aid. Employees were paid for all work time lost as a result of the tornado and the financial assistance given them does not have to be repaid. Over 100 of our employees at the Wichita Falls plant suffered loss as a result of the storm.

Within a relatively short period of time, many of the other Sprague plants were calling to offer assistance in any way such as collecting clothes, food, etc. Several employees active in their local churches in Wichita Falls, brought clothes and canned goods to the plant by the truckload to be distributed to employees and people whose homes were spared, offered to share their homes with those who needed shelter.

The clean up and rebuilding operations in the city have proceeded rapidly but the people will long remember the horror and devastation of the tornado - they will also remember the brotherhood and loyalty of their fellow man.

GENERAL CABLE ANNOUNCES NAME CHANGE

General Cable shareholders approved a corporate name change at the annual meeting on April 25 to GK TECHNOLOGIES, INCORPORATED. The new corporate name is a combination of two elements — the Company's New York Stock Exchange symbol (GK) which is widely known in the investment community, and TECHNOLOGIES, which indicates the Company's involvement in diversified and technologically-compatible businesses.

Although the corporate name will change, the familiar General Cable, Sprague Electric and Automation names will continue to be associated with their respective product and service lines.

Neal W. Welch and John L. Sprague, officials of Sprague Electric Company have been elected vice presidents of GK Technologies Inc. by the board of directors.

HOME, TRADE SHOW SETS RECORD

The 1979 Home and Trade Show was attended by 6,000 persons on April 27, 28 and 29.

It was the third annual Home and Trade Show sponsored by the Northern Berkshire Chamber of Commerce and more than 60 business exhibitors plus some non-profit agencies participated.

Sprague Electric's exhibit, "The World of Sprague Electric," offered a display of Sprague's international business, high technology electrical and electronic components, conducted on a global scale. Sprague invited visitors to their booths to take an industry-related test for eligibility for a prize drawing. Visitors were asked to answer questions on an entry card. Right answers appeared shortly afterward on a display panel.

This year's event was regarded as the most successful held and sponsors are looking forward to next year's Home and Trade Show.

BITS AND PIECES — GRAFTON

Our volleyball teams ended the season (2 men's teams and 1 women's team) and had their banquet at the Fox and Hounds Restaurant. Good food, good drink and a lot of fun!

Bowling teams also had their banquets. The first shift (a total of 4 teams) had a great time at the First Place East Restaurant and the 2nd and 3rd shift league had fun at Don's Country Run-Inn. Awards, drinks and a catered dinner topped the menu.

Good news for ladies . . . softball, the first game over . . . Sprague victorious, 19-12.

In the area of Safety, monthly winners thus far this year in our local safety contest (by department — for coffee and donuts) included Screening and Pre-Assembly for January/February, Slugs and Specialty for February/March, and for April, Assembly, Final Test and Quality Assurance and Reliability all tied for first place!

Suggestion Awards this year have gone to Rose McMenamin in the amount of \$100.00, with more to come for a final payoff. Also Bob Zipter received \$50.00 with additional payment to follow.

AXIAL GRID DIP/LEAD PULL TESTER



Sprague-Barre has implemented a new production tool that has provided a significant improvement in the quality of parts shipped for critical applications, such as automotive electronics. A special machine was designed and built at the Barre plant which physically and electrically tests the integrity of lead attachment on every part, and rejects those with inferior welds. Axial parts are fed automatically via magnetic arrays, onto a "walking beam" conveyor. Leads are pulled with a one pound test pull which destroys parts if the weld is bad. Parts that have marginal-quality welds are simultaneously tested further for "opens" by timed Grid Dip Meters and either passed or rejected for encapsulation based on this measurement. The tester has worked extremely well, with very little attention - and greatly reduces the probability of marginally good parts getting into the field. Customer returns for "opens" in these lines of parts dropped to "zero."

Pictured above is employee Leora Norkeveck operating the new testing equipment.



THE AMERICAN WAY July 4th

On Wednesday, July 4, it will be just 203 years since the most revolutionary political declaration was ever made to mankind.

Previous to that date, it had never occurred to anyone in the political field that the individual person had any rights which could not be taken away from him at will by the state, the monarch, or the ruling class.

But on that date, 203 years ago, a small group of dedicated men, aware of the part played in their lives by Divine Providence and believing in the essential dignity and importance of just plain people, composed and published the American Declaration of Independence.

It wasn't so important that *they* declared the original 13 colonies *are and by right ought to be free and independent*. It wasn't so much that they pledged their lives, their fortunes, and their sacred honor to this Declaration, although that fact marked them for death if captured.

What mattered most was that for the first time in human history, a government was planned which would preserve, protect and defend certain *inalienable rights* — life, liberty, and the pursuit of happiness, all vouchsafed from God, and therefore beyond the reach of governments, politicians, bureaucrats, or tyrants.

Freedom carries with it individual responsibility. All of us should resolve that individually, as Americans, we will accept that responsibility for the preservation of freedom.

SPRAGUE ELECTRIC LOG ISSUE 2, 1979

Norma M. Hays, *Editor*

Associate Editors:

Robert M. Arena, Sanford

David C. Cates, Visalia,
Los Angeles

James P. Clucus, Barre

James R. Desens, Grafton

Robert J. Diodati, North Adams

McDaniel Harless, Hillsville

William R. Kuslaka, Concord

Marion H. Manion, North Adams

Edward J. Noel, Nashua

Stuart A. Sutherland, Orlando

Fred T. Thompson, North Adams

Thomas D. Vangel, Worcester,
Micro-Tech

Hugh H. VanZelm, Jr., Annapolis
Junction

Clayton D. Weaver, Lansing

Albert L. Ziegler, Jr., Wichita Falls
Brownsville

William Williams III, Clinton

Paul S. Sprague - *Photographer*

WORCESTER PLANT KICKS OFF "PROJECT OWNERSHIP"

Worcester employees are getting involved in a plant beautification program to make their plant a better and more attractive place to work. By being involved, as all employees are asked for suggestions on ways to improve the plant, a committee of office and factory personnel meeting regularly collect employee ideas and see to it that the good ones are implemented. This includes selecting areas of the plant to be painted and choosing color schemes, renovations and general clean up.

Projects recently completed are the reception lobby and employee cafeteria. The lobby has been painted and carpeted while the cafeteria has new wallpaper and paint, furniture, and equipment. Future projects include painting of the Industrial Relations area and employee entranceway, painting of hallways and adding sitting benches on the front and side lawn.

BRUCE B. WOODGER Named Plant Manager



Bruce B. Woodger has been appointed plant manager of the Sprague Electric Company's Brown Street plant in North Adams, it was announced by James P. Sherry, general manager oil/paper and film capacitor

SPRAGUE INTEGRATED CIRCUITS USED WORLD-WIDE

E rapidly becoming more popular than the telephone, the ubiquitous seven-segment display, which first became common in electronic calculators, is now being used in arcade games, scales, industrial controls, cash registers, computers, automobiles, ovens, dishwashers, etc. World-wide, Sprague is either the preferred or an approved manufacturer for the integrated circuits which activate the display. In our Semiconductor operation in Worcester, MA, we presently make hundreds of thousands of units per month to operate any of the common display types.

Also in Worcester, our Linear Groups have several large contracts to design integrated circuits for many of the world's largest radio, TV, and camera manufacturers. These new devices promise to make consumer electronics devices more efficient, more reliable, less costly, and with improved performance. Over 15M consumer linear ICs are shipped per year.

operations. He succeeds the late Noel Sears in this post.

Mr. Woodger has been with the Sprague Electric Company for the past 14 years in various engineering and manufacturing positions and was, until his promotion, materials manager for the company's wet and foil tantalum capacitor operations in North Adams.

Mr. Woodger is a graduate of Boston University. He is a native of Pittsfield and he and his wife, Kristin, and three sons make their home at 131 Bushey Road in that city.

SPECIAL AWARDS — HILLSVILLE

McDaniel Harless, Industrial Relations Manager, Sprague Electric Company has announced employees were recently given Special Awards for working all scheduled work days.

Employees completing 10 years without missing a scheduled work day are:

Dean Larrowe
Donald Bowman
Zula Martin

Eight year awards went to:

Bobby A. Shockley

Five year awards went to:

Darrell Goad

In addition, John P. Jackson and Olen Gardner completed 4 years.

Three years without a day absent are:

Joe Alderman
Eldon Horton
Dewey Marshall

Bernard Allen
Dennis Jennings

Lorene Coleman

J. R. Parnell

Clara Belle Nester
Jerry Anderson

Two years without missing a day at work are:

Bennie Akers	Glen Banks
Carl Fariss	Darrell Fowler
Roy Vass	Harley Bryant
Leon Caviness	Rudolph Gardner
Heath Newman	William Tate
Danny Bowman	Alva Bryant
Timmy Quesenberry	Alma Mabe
Ruby Cagle	Lealen Rakes

Perfect Attendance Bonus Days were awarded for 1 year to:

Geneva Cox	Alan Cox
Dorothy Martin	Thelma Lundy
Dennis Quesenberry	Larmie Sowers
Bobbie Turman	Dennis Melton
Donna Alderman	Roger Horton
Edward Gardner	Roger Lindsay
Carolyn Edwards	Joe Thomas
Nancy Morris	James Stilwell
Glenn Nester	Lane Hubbard
Hazel Melton	Elwood Reynolds
Betty Fariss	Kenneth Hardy
Linda Nester	Mary F. Dalton
Pauline Semones	Trudy Vass
Velva M. Dalton	Luetta McGrady
Bryan Ensley, Jr.	Maxilene Hill



Award winners pictured are front row left to right: Darrell Goad, J. R. Parnell, Bobby A. Shockley, Lorene Coleman.

Back row left to right: Dean Larrowe, Bernard Allen, Donald Bowman, Dennis Jennings, Zula Martin.



TWICE GOLD MEDAL WINNER — Senator Edward M. Kennedy, left, presents the Electronic Industries Association's Medal of Honor to Robert C. Sprague, Sr., founder and honorary chairman of the Sprague Electric Company, at the association's annual Government-Industry Dinner in Washington, April 3. Shown at the right is Roland M. Bixler of JBT Instruments, Inc., chairman of the E.I.A. Board of Governors. Mr. Sprague is the first man in the 55-year-old history of the association to receive this gold medal twice. He was first honored in 1954, after serving as chairman and president of the group. Nearly 1000 persons attended the dinner at the Shoreham Americana Hotel, representing many government officials and 300 member companies involved in the research, design, engineering, and manufacture of electronic systems and components in the United States.

Photo by Sidney L. Chertok

SUGGESTION UPDATE

Hugh van Zelm

In 1978 our plants projected \$25,031 in awards for approved suggestions. They beat that goal by over \$5,000 and gave out \$30,651 to our creative employees. Sanford gave out over \$9,000; Concord and Wichita Falls over \$7,000; Lansing over \$2,000 and North Adams over \$1,000.

Suggestions are like a snowball moving downhill. The system gathers speed with the number of employees who submit their ideas.

Employees say they like the system but many times there is a long wait from submission date until final determination. Of course, there are reasons for this but we will try to lower the "check out time" of all suggestions in the upcoming months.

The best ideas about a machine or process come from the employee who works on or with this particular system(s) or piece of equipment. We've got the money to be absorbed by the employee who has the good idea. We've found the toughest part about a suggestion system is writing it down — so if you need any assistance ask for it in the Industrial Relations Department.

We predicted \$36,781 to be awarded during this year. Don't you want a piece of this action? In most cases you know more about your particular job than anyone else so send us a suggestion form — soon!

THE HUMAN BACK

Philip T. Brucato

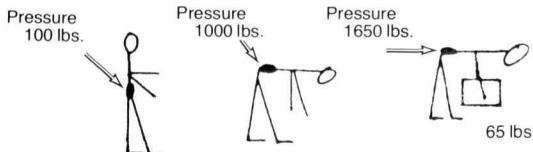
BEND YOUR KNEES AND SAVE YOUR BACK Remember this statement the next time you are ready to lift an object. One of the most vulnerable parts of the human body is the spine, in particular the lower spine. Statistics show that 2 out of 10 people will suffer back pain at some time in their lives and that 50% of lost work time is due to back injuries. Of that 50% lost work time 50% of those casualties result from improper lifting. Read on to learn a little more about your back and what you can do to prevent back injuries.

Your back is made up of a delicate layer of 33 bones (vertebrae); the upper 24 are separated by "disks" that act as cushions, 18 inches of spinal cord, 31 pairs of nerves branch in and out from the spinal cord and some 400 muscles which are attached to the bone by about 1,000 tendons.

Back sprains, a common problem, occur when the back's muscles or ligaments are stretched or torn, usually from common activities that were done improperly, such as bending, lifting, standing or sitting. Perhaps your feet were off balance as you swung a hammer or shovel; you were lifting with your knees straight (remember to always bend your knees) and you turned quickly.

A ruptured or "slipped" disc causes pain in the lower back. Rarely does carrying heavy weights or the stress of lifting break bones. Instead the discs between the bones or the muscles holding the bones upright are damaged.

The back for all intended purposes acts as a mechanical crane (lever) when used incorrectly. The pivot point being your lower back and the crane arm being your upper body. Studies show that the mechanical ratio is approximately 10:1. This means that the pressure exerted on the pivot point of your back is approximately ten times the amount you are lifting. The following illustration explains this point (assuming upper body weight is 100 lbs.).



This needless additional pressure on your back only adds to the overall wear and tear of your back. Although disabling back injuries may seem to occur all at once the real problem results from the cumulative effect of abusing your back.

Here are some simple rules which will help you prevent back injuries.

LIFTING

1. Stand close to the object. Have firm footing.
2. Squat down, straddle the load somewhat. Keep back straight; bend knees.
3. Grasp object firmly; be sure grip won't slip.
4. Breath in inflated lungs helps support the spine.

5. Lift with legs . . . slowly straightening them. After legs are straight bring back to vertical position.

6. Hold object firmly close to the body.

7. Avoid jerky motions, turn with feet instead of twisting back.

STANDING

Stand tall, head held high, chin tucked in, abdomen flat, chest slightly up and forward. When leaning forward bend knees slightly.

SITTING

Keep knees higher than hips; use a low stool to raise feet. Cross knees for temporary relief (alternate often). Keep lower back flat against firm backrest.

SLEEPING

Sleep on firm mattress, or use a bedboard between spring and mattress. Lie on side with hips and knees bent, or on back with pillow under knees. Avoid sleeping on stomach.

These are some simple points that apply to everyday life both on and off the job. Follow them and you will better protect yourself from a discomforting back injury.

SPRAGUE BASKETBALL LEAGUE A WINNER

The North Adams Sprague Electric entry in the "A" League of the Northern Berkshire YMCA Basketball League finished first in both the regular season and the post-season play-offs. Their record during the regular season was 14-1 and they finished the season by winning a two of three game play-off series with the runner-up, Captain's Table team. The team also fared well in another Massachusetts Tournament held at the Greenfield, Massachusetts YMCA, going to the semi-finals before bowing out to a team from Springfield, Massachusetts.



Robert Diodati, North Adams Industrial Relations Manager is shown presenting the trophy given by Northern Berkshire YMCA Industrial League to Edgar Amrol of Purchasing. Other players in the picture are (left to right) James Borowski, representative of Massachusetts Rehabilitation Commission, who works with Sprague Electric in their programs to employ the handicapped, Alan Giorgi of Ceramics and Fred Thompson of Industrial Relations.



Pictured is the Sprague Barre Management Team who for a few hours on May 15, 1979, were waiters and/or waitresses. They served a fried chicken lunch to their co-workers in appreciation of the effort and performance that contributed towards a substantial increase in the plant's "YIELD" over a one year period. Their co-workers were impressed with the event and as one co-worker commented, "The table was turned, if only for a few hours."

SCHOLARSHIP RECIPIENTS 1979

We are pleased to announce that the Sprague Electric Company has just awarded \$34,900 in Scholarship Awards to 39 children of Sprague employees. This award will be distributed over the 4 year period while they attend college. We would like to again congratulate the students for their fine academic records while in high school and wish them continued success in their college endeavors. We feel it is indeed an honor for all of the parents listed below to have such young achievers with college bound goals.

NORTH ADAMS

STEPHEN CHESELDINE, son of David Cheseldine, who is awarded \$400 per year for his 4 years at Rensselaer Polytechnic Institute.
JAMES GARNISH, son of Paul Garnish, who is awarded \$200 per year for his 4 years at the University of Massachusetts.

TRACEY HARRIMAN, daughter of Jan Harriman, who is awarded \$200 per year for her 4 years at Bucknell University.

CATHY HEYES, daughter of Arthur Heyes, who is awarded \$400 per year for her 4 years at Ithaca College.

WILLIAM KING, son of Bill King, who is awarded \$300 per year for his 4 years at the University of Lowell.

KEVIN KOCZELA, son of Stanley Koczela, who is awarded \$400 per year for his 4 years at Amherst College.

CAROL PEAD, daughter of Stuart Pead, who is awarded \$250 per year for 4 years at the University of Lowell.

ALAN RONDEAU, son of Albert Rondeau, who is awarded \$200 per year for his 4 years at the University of Massachusetts.

SANDRA WHITE, daughter of Harold White, who is awarded \$150 per year for her 4 years at Bowdoin College.

DANIEL BONA, son of Pauline Bona, who is awarded \$300 per year for his 4 years at Williams College.

STEVEN ELLIOTT, son of Norman Elliott, who is awarded \$500 per year for his 4 years at Appalachian State University.

PAMELA J. GOODMAN, daughter of Kenneth Goodman, who is awarded \$250 per year for her 4 years at Appalachian State University.

SUSAN FARMER, daughter of Carl Farmer, who is awarded \$125 per year for her 2 years at Wilkes Community College.

JUNE BROOKS, daughter of James Howard Brooks, who is awarded \$125 per year for her 2 years at Wilkes Community College.

LARRY MURPHY, son of Jeannine Murphy, who is awarded \$500 per year for his 4 years at Oral Roberts University.

EDWARD EDMOND, son of Maurice Emond, who is awarded \$500 per year for his 4 years at New Hampshire College.

LISA LAPIERRE, daughter of Carl LaPierre, who is awarded \$500 per year for her 4 years at the University of New Hampshire.

ROGER KNEPPRATH, son of Lucille Knepprath, who is awarded \$500 per year for his 4 years at Northwestern Lutheran College.

RONALD FLOSER, son of Ronald Floser in our Boston Sales Office, who is awarded \$250 per year for his 4 years at Babson College.

SHEILA CONNER, daughter of Vivian Conner of our Clinton Branch, who is awarded \$250 per year for her 4 years at the University of Tennessee.

BILLY D. SLATE, son of Barbara Slate, who is awarded \$200 per year for his 4 years at East Tennessee State University.

RICKY L. THOMAS, son of Joseph Thomas, who is awarded \$200 per year for his 2 years at New River Community College.

TIMOTHY D. LYON, son of Earl Lyon, who is awarded \$200 per year for his 2 years at New

ASHE COUNTY

RIVER COMMUNITY COLLEGE.

LINDA F. HORTON, daughter of Hubert Horton, who is awarded \$200 per year for her 2 years at Surry Community College.

CAROL A. BOWMAN, daughter of Wilma Bowman, who is awarded \$200 per year for her 4 years at college starting with the first 2 years at Wytheville Community College.

MARY K. SOUTHERN, daughter of Charles Southern, who is awarded \$300 per year for her 4 years at Radford College.

ANTHONY V. MARSHALL, son of Vernon and Wanda Marshall, who is awarded \$300 per year for his 4 years at Virginia Polytechnic Institute.

LISA MACDONALD, daughter of Clyde MacDonald, who is awarded \$250 per year for her 2 years at Valencia Community College.

JOAN M. SUTHERLAND, daughter of Stuart Sutherland, who is awarded \$400 per year for her 4 years at Loyola University.

WENDY SMITH, daughter of Vernon Smith, who is awarded \$350 per year for her 4 years at the University of Central Florida.

PAMELA FORTIN, daughter of Vivian Fortin, who is awarded \$500 per year for her 2 years at Endicott Junior College.

SANDRA MELANSON, daughter of Cecile Melanson, who is awarded \$500 per year for her 4 years at the University of Maine.

NEIL TROOST, son of Daan Troost, who is awarded \$250 per year for his 4 years at Florida Institute of Technology.

ADELIA LUNA, daughter of Margaret Luna, who is awarded \$150 per year for 4 years at Midwestern State University.

ROY D. HENRY, son of Leslie Fuller, who is awarded \$150 per year for his 4 years at Midwestern State University.

KATHY BONENBERGER, daughter of Janis Johnson, who is awarded \$200 per year for her 4 years at the University of Oklahoma.

ARTHUR LESSARD, son of Rita Lessard, who is awarded \$200 per year for his 4 years at the University of Massachusetts.

STEPHEN PLOUFFE, son of Doris Plouffe, who is awarded \$300 per year for his 4 years at the University of Lowell.

THOMAS E. DUFF, son of William Duff, who is awarded \$250 per year for his 4 years at Lowell University.

BARRE

NURSED AID
Going Abroad . . .

Each summer, millions of Americans go abroad and a portion are bound to have accidents. There are others, too, who will unexpectedly be struck down by unlikely diseases and require immediate medical aid.

With this in mind, and the fact that more than 10,000 civilian Americans are expected to die abroad this year — some of whom might have been saved if doctors had to do less guesswork — you should consider these six tips before going abroad:

1. Prepare a short medical history of yourself and keep it either with your passport or your international identification card, where it can easily be located.

2. Make sure to record if you have any allergies or hypersensitivities as well as what regular medication you take. Also, record your blood type and eyeglass prescription.

CONCORD

3. A complete record should also contain the name and whereabouts of your personal physician along with what kind of health insurance you have, including the number of the policy.

4. Do not carry illegal drugs with you. Long jail terms and heavy fines are the rule in some countries for mere possession.

5. Remember that Medicare generally does not pay out-of-country medical bills for persons 65 and over traveling or living abroad.

6. If you are not certain about local medical standards and need treatment, contact the nearest U.S. Embassy or Consulate.

- If you're interested in knowing the names of English-speaking doctors around the world, a directory is available (donations are appreciated) from the International Association of Medical Assistance to Travelers, 350 Fifth Avenue, Suite 5620, New York, NY 10001.

GRAFTON

GENERAL AWARD

RICKY L. THOMAS, son of Joseph Thomas, who is awarded \$200 per year for his 2 years at New River Community College.

TIMOTHY D. LYON, son of Earl Lyon, who is awarded \$200 per year for his 2 years at New

HILLSVILLE

MANAGEMENT CHANGES

Management changes since our last publication include:

Barre:
Brownsville:

Brock M. Hedrick, Cost Standards Analyst.
Phillip W. Miller, Process Engineer.

Concord:

George Mills, Production Control Manager; Robert Hall, EDP Operations Supervisor; Allan Kimball, Product Manager (Special Products); Rod Foster, Product Manager; Paul Simard, Section Head-Equipment Modification and Maintenance; Nate Chapman, Product Marketing Engineer; Paul Himes, Methods and Planning Engineer; John Nolin, Production Foreman; R. Ford, Production Foreman; Harold W. Ames, Jr., Equipment Design Engineer; Clifford Seddon, General Foreman; Kathy Preve, Plant Accountant; Donald Stephenson, Manager Process Engineering.

Grafton:

Kenneth Jahnke, EDP Operations Supervisor; George Mantey, Acting Plant Manager, Angeline Burmesch, General Foreman; Don Bender and De Wayne Kahler, Superintendents.

Lansing:

Carl Simmons, Production Foreman; William M. Little, Process Engineer; Richard Gary, Equipment Design Engineer.

Los Angeles:

Deborah L. Penn, Product Design Engineer; Joseph L. Rotino, Quality Control Engineer.

Nashua:

Michael Gagne, Industrial Relations Manager, Robert Purple, General Manager, Thick-Film Operations; Kendall A. Roche, Process/Product Engineer; William Konopka, Manpower Control Analyst.

North Adams:

Herbert L. Rice, Operations Engineering Manager-Oil/Paper & Film Capacitors; Martin H. Bell, Plant Manager Ceramic Product Operations; Roy King, Manager Process Development & Engineering; Roger Follett, Operations Manager, Filters; Sandra L. Belanger, Manager Specification Control & Distribution; Thomas Kustra, Sr. Programmer Analyst; William Peverett, Supervisor Application Programming; Vincent Moderski, Supervisor Systems Programming; Pauline Sadlowski, Work Factor Analyst; John Crabtree, Equipment Design Engineer; Francis Crea, Materials Manager; Robert A. Rousseau, Sr. Product Cost Coordinator.

Orlando:

Glenn Paul, Methods and Planning Engineer.

QAR:

Richard Schmidt, QAR Manager, Grafton; Stuart Gillespie, Division Q.C. Engineer, Monolithic and Ceramics Division; Dennis Freeman, QAR Manager, Wichita Falls; Kenneth Manchester, QAR Manager, Worcester; Lyle Blanchard, Superintendent of QAR, North Adams; Stanley Purwin, Division QAR Manager, Sanford; Thomas Yasewicz, QAR Manager, Concord.

Sales:

Ralph N. Laughlin, District Sales Manager, Huntsville, Alabama; John F. Norris, Product Marketing Manager, Hillsville; Jack E. Taylor, Product Marketing Manager, Lansing; Richard M. Washabaugh, Sr. Product Specialist, Wichita Falls; John Webb, Sr. Product Specialist, Nashua; Richard C. Snyder, Sales Engineer, Florida; Roger P. Hilderbrand, Sales Engineer, Chicago.

Sanford:

Coco Hirstel, Employment Manager; Douglas Edson, Process Engineer; Okon Anwana, Process Engineer.

**Sprague
Products:**

Allyn M. Bascom, Vice President; Joseph J. Judge, National Sales Manager; Kenneth A. King, Eastern Regional Manager; Michael Diodati, Assistant to District Sales Manager; Patricia Bolza, Sales Order Administrator; James Ramlose, Sales Engineer; Gary Dow, Accounts Receivable Supervisor; Janice Duguay, Sales Order Administrator.



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Visalia:

Kermit R. Littleton, Sr. Manufacturing Engineer; Peter Shkabara, Sr. Process/Product Engineer.

Wichita Falls:

Gary Harland, Process/Product Engineer, Charles B. Ward, Jr., Sr. Product Engineer; Albert Zigler, Acting (Area) Industrial Relations Manager; Gerald Boyette, Process Engineer; Gifford Rainold, Methods and Planning Engineer; Robert Lifsey, Sr. Programmer Analyst; Gloria Bohannon, Assistant Industrial Relations Manager; James West, Production Foreman.

Worcester:

Mathew Caldwell, Manager Test Center; Paul Roughan, Manager Manufacturing Engineering; Robert Milewski, Product Manager; Allan Ledoux, Product Engineering Manager; Mark Hanlon, Product Engineering Manager; Robert Genesi, Design Engineering Manager; Steven Miles, Manager Product Design Engineering; Elizabeth M. Todd, Buyer; Michael P. Fessler, Product Design Engineer; Elliot Kaplan, Equipment Design Engineer; Walter Sullivan, Product Marketing Engineer.

THOMAS L. BROWNE Named Vice-President



Thomas L. Browne has been named Vice President, Manufacturing-Europe of the Sprague World Trade Corporation, effective July 1. Mr. Browne has been General Manager of our company's Thick-Film Circuit Operations in Nashua, New Hampshire.

Mr. Browne will make his headquarters in the offices of

Sprague-Europe G.I.E. at Ferney-Voltaire, France. He will be responsible for the company's manufacturing operations at plants in Belgium, France, Germany, and Scotland.

Tom joined Sprague Electric in 1974 as manager of long range planning for the Passive Electronic Components Operations and successively became plant manager of our Oil/Paper and Film Capacitor Operation at North Adams before being promoted to his present position.

He received his B.A. degree from Kent (Ohio) State University in 1956 and then joined Union Carbide Corp., where he became plant manager of various capacitor operations in Cleveland, Ohio; Greenville, S.C.; and Darlington, England. He joined Nordson Corp. in Amherst, Ohio as manager of manufacturing in 1970, leaving to become vice president of manufacturing at Northland Electric Motors Division of Scott-Fetzer Corp. at Watertown, New York in 1973. Mr. Browne engaged in graduate studies at the University of South Carolina and Cleveland State University.